M. inuus differs generically from *irus*, *rhesus*, and *nemestrinus*, I provisionally, and quite without prejudice, retain the name *Macaca* for those forms.

By the structure of the *glans penis*, then, the genera of macaques above discussed may be distinguished as follows:—

a. Penis with the glans very long and tapering, and strengthened by a baculum of corresponding length; the urethral orifice interior, in the middle line beneath the apex of the baculum ..... Genus *Lyssodes*.

a'. Penis with the glans short, rounded, subovate or piriform, supported by a short baculum; the urethral orifice a vertical terminal slit, slightly eccentric and opening to the right of the apex of the baculum.

b. Posterior border of upper surface of glans forming a transverse crescentically curved thickening, without median notch ..... Genus *Zati*.

b'. Posterior border of upper surface of glans unthickened, but mesially notched ..... Genus *Macaca*.

The glans penis of *M. inuus*, the type of the genus *Macaca*, is of the kind stated above under that heading. This was long ago pointed out by Daubenton (see Buffon and Daubenton, Mammifères, v. p. 95, 1830; Planches, iv. pl. ccccxv. fig. 1, 1833), who described some points in the anatomy of that species, which he called "le Magot."

A fact of interest to be noted is that whereas the adult males of *Macaca irus* and *Zati sinicus* are not very unequal in size, there is an enormous difference in the relative size of the penis.

XXIX.—*A new Species of* Bassaricyon.

By R. I. Pocock, F.R.S.

The following species of the rare genus *Bassaricyon* have been described, their arrangement, in accordance with their distribution from north to south, being as follows:—

B. richardsoni, Allen, Bull. Amer. Mus. Nat. Hist. xxiv. pp. 662–668, figs. 5, 7, 9, 11 (1908).
From Rio Grande, Nicaragua.

B. gabbi, Allen, Proc. Acad. Nat. Sci. Philad. 1876, pp. 20–23, pl. i.; id. Bull. Amer. Mus. Nat. Hist. xxiv. pp. 662–668, figs. 6, 8, 10, 12 (1908).
From Talamanca and Chiriqui in Costa Rica.

Huet, Arch. Mus. d'Hist. Nat. Paris, (2) v. pp. 1–12, pls. i.–xi. (1883), described specimens referred to *B. gabbi* from Caimito in the province of Chorrera, N.W. Panama.

B. medius, Thomas, Ann. & Mag. Nat. Hist. (8) iv. pp. 232–233 (1909).

From Jiminez, mountains inland of Chocó, W. Colombia, alt. 2400′.

B. alleni, Thomas, Proc. Zool. Soc. Lond. 1880, pp. 397–400, pl. xxviii. text-figs. 1–4.

Typically from Surayacu on the Bobonasa River, Upper Palasta River, Ecuador, but stated by Thomas in 1909 to range from Venezuela to Peru, the most southern locality known being Chanchamayo.

In 1909 Thomas referred the above-cited species to three groups :—

1. Skull rounded, with very convex frontal profile. General colour less fulvous, more greyish or brownish	[*B. richardsoni*). *B. gabbi* (and possibly
2. Skull rounded. General colour strongly fulvous	*B. medius.*
3. Skull comparatively flat and low. Colour fulvous	*B. alleni.*

Twenty years after the publication of the description of *B. alleni* Beddard * described the anatomy of a specimen, captured in the woods at Bastrica on the Essequibo River in British Guiana, adopting for it the name *B. alleni*, tentatively applied to it as a living animal by Dr. Sclater † in 1895. Allen, apparently on the assumption that the identification of the animal was correct, was inclined to doubt the accuracy of the locality. It seems to me, however, impossible to set aside such very precise information as that supplied by Mr. A. Murray, the donor of the specimen to the Zoological Society. Fortunately the skeleton of this *Bassaricyon* has been preserved ; and upon comparing the skull with the figures and description of the skull of *B. alleni*, I find in the first place that the reference of the specimen to that species is quite untenable, and, in the second place, after extended inquiry, that the specimen cannot be referred to any of the described species, but comes nearer apparently to *B. gabbi* or *B. medius*

* Proc. Zool. Soc. Lond. 1900, pp. 661–775.

† *Ibid.* 1895, p. 521.

than to any known form. I purpose, therefore, to describe it as new, dedicating it to Dr. Beddard, F.R.S., to whom we owe all that is known of the internal anatomy of this genus.

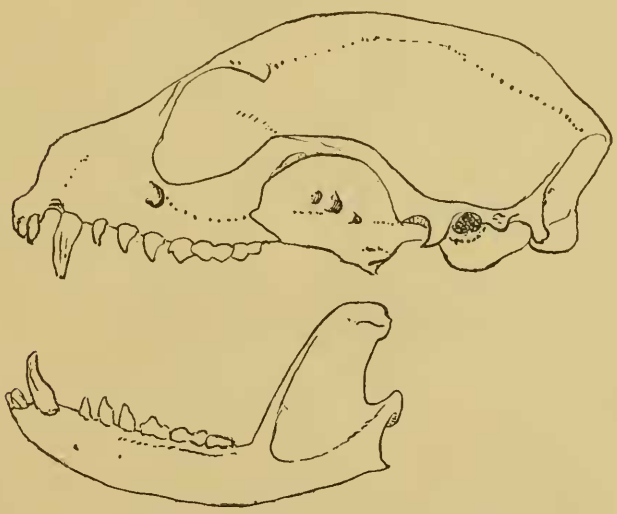
Bassaricyon beddardi, sp. n.

Bassaricyon alleni, Beddard, Proc. Zool. Soc. 1900, p. 661 (nec Thomas).

All the information we possess about the colour is Beddard's record that it was darker than that of *B. alleni*.

Skull with muzzle short and low, very much as in *B. gabbi*. The interorbital region not elevated and convex as in that species, but with a median depression and otherwise flat, so that in profile view the portion of the frontal bones forming this region does not project above the upper edge of the orbit

Fig. 1.

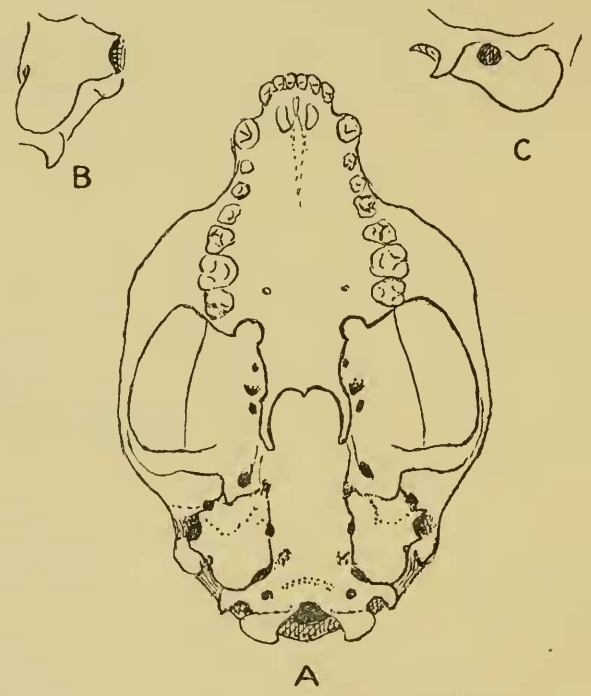


Lateral view of the skull of *Bassaricyon beddardi*, nat. size.

anterior to the postorbital process. Area of the cranium behind the postorbital process more elevated than in *B. gabbi*, then inclined backwards and slightly downwards, the posterior third of the upper surface of the brain-case somewhat abruptly sloped to the median occipital prominence. The zygomatic arch comparatively high, horizontal for some distance behind the postorbital angle. Palate broad; transverse width of upper jaw across the outer edge of the

penultimate cheek-teeth ($m.^1$) * equalling the length of the cheek-teeth from the anterior edge of the canine to the posterior edge of the last tooth ($m.^2$) ; a prominent angular process behind $m.^2$ forming the outer border of a semicircular notch at the anterior end of the posterior palate, which is wide ; mesopterygoid fossa also wide, considerably wider than long.

Fig. 2.



A. Lower side of skull of *Bassaricyon beddardi*, nat. size.
B. Inferior view of right bulla of *B. gabbi*, from Chiriqui.
C. Lateral view of left bulla of type of *B. alleni*.

B and **C** are from rough unmeasured sketches.

The pterygoids produced inferiorly, so that their spinous apex, in profile view, projects considerably below the process formed by the posterior margin of the glenoid. Bullæ depressed behind towards the paroccipital process, most

* Thomas speaks of $m.^3$, as if the premolar-molar formula was 3—3 instead of 4—2.

strongly inflated antero-internally alongside the carotid foramen.

Measurements of skull of type-specimen.—Greatest length 78 mm.; condylo-basal length 73·5; breadth across zygomata 50, interorbital 19, of muzzle behind canines 16·5, of premaxillæ across incisors 9, of brain-case 35, of palate 17, outside first molars 27, of posterior palate across notches 10; length of palate 40, of cheek-teeth (including canine) 26.

Hab. Bastrica woods, Essequibo River, British Guiana.

Type. Adult female, which lived in the Zoological Gardens from 1894 to 1900. The skull shows no trace of sutures, but the teeth are unworn and the temporal crests form two low, widely separated ridges as wide apart above the squamosal as the width of the forehead. It may be added that this skull shows no indication of the osseous deterioration and malformation so well known in many mammals which have been captured young and kept for some time in captivity.

Resembling *B. gabbi*, and differing from *B. alleni* and *B. richardsoni*, in the width of the palate measured across the outer edge of the first molars, also in the breadth of the posterior portion of the palate and of the mesopterygoid fossa, but differing from *B. gabbi* in the flatness of the interorbital region, the uneven curvature of the upper edge of the brain-case seen in profile view, the somewhat constricted and more prominent occiput, and in the shape of the zygomatic bar, which is much more highly arched, especially the portion behind the postorbital angle. It further differs from the three species in the downward extension of the pterygoid, the apex of which may be seen, in profile view, to project much lower than the process formed by the posterior rim of the glenoid. The bulla also is more inflated anteriorly than in *B. gabbi*, *B. richardsoni*, and *B. alleni*, its lowest point, in profile view, being almost immediately below the auditory meatus, and not below the mastoid as in those species. In the flatness of the forehead *B. beddardi* seems to resemble *B. alleni*; but, in addition to the differences pointed out above, the former may be at once distinguished from the latter by the shape of the muzzle of the skull, which is a little narrower and more depressed even than in *B. gabbi*. The mandible has a more convex inferior border than in the other species, the tooth-bearing portion of the ramus being more curved. In these respects *B. beddardi* is most like *B. gabbi*, but the summit of the coronoid is very different in shape in the two and the condyle is much less prominent than in *B. gabbi*. Thomas described *B. medius* as differing from *B. gabbi* in having the rounded character of the skull

less strongly marked. It also has the frontal outline convex and the interorbital space slightly convex and not flattened. It is impossible, therefore, to identify the specimen above described with *B. medius*, although, like that species, it has the muzzle smaller and lighter than in *B. gabbi*. Since Thomas says nothing about the bullæ and the downward extension of the pterygoid, I presume that in those respects *B. medius* is like *B. gabbi*.

Since writing the foregoing description of *B. beddardi* and determining its distinctness from extant descriptions and published figures, I have compared the skull with the skulls of the genus *Bassaricyon* in the British Museum, which, as identified by Oldfield Thomas, belong to the species *alleni*, *gabbi*, and *medius*. This comparison completely confirms my previously formed opinion as to the validity of the species. Although I have laid undue stress upon the downward extension of the pterygoid, I have no doubt whatever that the specimen above described represents a hitherto unrecognized form characterized mainly by the combination of the following characters:—(1) The flat interorbital region followed by the high rounded forehead; (2) the great width of the palate and mesopterygoid fossa; (3) the anterior inflation of the bulla.

I may add that in the original figure of the type of *B. alleni* the posterior inflation of the bulla, seen from the side, is not adequately represented, and that in an example of *B. gabbi* from Chiriqui the styloid portion of the bulla is much more deeply excavated than in *B. beddardi*. This point is not clearly indicated in Allen's photogravure of the skull (*loc. cit.* p. 665, fig. 10).

XXX.—*Two new Indo-Malayan Rats.*

By Herbert C. Robinson, C.M.Z.S.

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Examination of the type and other specimens in the British Museum attributed to *Rattus rajah* (Thos.) shows that two forms are represented—viz., the true *R. rajah* from various parts of Sarawak, and another from Kina Balu, in British North Borneo, apparently unnamed, which I propose to call